Far away from its Western home, a wildflower from the Great Plains survives in one Illinois location —and nowhere else in the East.

West by Midwest

Story By Susan Post
Photo By Michael Jeffords

Henry A. Gleason, a botanist best known for *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, explored the sand areas of the Havana region in the early 1900s while a student at the University of Illinois. The area referred to as "Devil's Neck" is now contained within his namesake: the Henry A. Gleason Nature Preserve, Mason County.

Devil's Neck was described in the early 1900s as a great expanse of waste-sand extending east and north for nearly a mile. The silvery bladderpod (Lesquerella spathulata, later renamed Lesquerella ludoviciana) Gleason found is a typical species of the Great Plains and adjacent mountains, more at home in North Dakota or Utah than Illinois.

The 60-foot sand dune, blackjack oak forest and stretches of sand prairie found at the preserve contrast sharply with the black soil landscape of central Illinois. The sand, deposited in the Illinois River valley a few thousand years ago by the meltwaters of the Wisconsin glacial episode, creates a special home for a unique collection of plants and animals. The flora here is a combination of plants common to the tallgrass prairie of Illinois—little bluestem, butterfly-weed and rough blazing-star—and western plants usually associated with drier, open habitats—prickly-pear cactus and silvery bladderpod.

In Illinois, silvery bladderpod blooms in May and is known only from Mason County. It is about 4 to 8 inches tall with many slender branches which curve upward and outward. The plant's narrow leaves are covered with a dense layer of star-shaped hairs and the plant is anchored with a heavy taproot. Both the hairs and taproot are adaptations to help the plant survive in this desert-like environment.

Although the sandy areas receive the same amounts of heat, light, rainfall and wind as the rest of the state, they experience larger variations in day-to-night and surface-to-subsoil temperatures. The waterholding-capacity of the sandy soil is low, and in open areas the surface sand constantly shifts, sometimes forming dunes or blowouts. All of these contribute to the landscape that Gleason found so fascinating and explored for nearly 60 years.

Although not a typical showy wildflower, *Lesquerella* is important. This is its eastern-most location in the United States, and while Gleason Nature Preserve may be small, it is rich in history—from the time of Gleason and back through the ages.

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The Rare Plant Task Force is composed of biologists throughout the state who are dedicated to the conservation and protection of the rare plant species of Illinois.